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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/477,985      | 01/05/2000  | PALLAB MIDYA         | SC10874TC           | 1033             |

7590

08/06/2003

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EXAMINER

NGUYEN, MINH T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/477,985

Applicant(s)

MIDYA ET AL.

Examiner

Minh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 9-15, 21-24 and 30-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 16-18, 20 and 25-29 is/are rejected.
- 7) ☒ Claim(s) 4 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Applicant's response to restriction requirements without traverse filed on 6/27/03 has been entered. The following is a detail of Office Action of the elected species, i.e., claims 1-8, 16-20 and 25-29.

### *Information Disclosure Statement*

2. The information disclosure statement filed 1/5/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. *Form PTO-1449 is found but no copy of the listed references is provided.*

### *Specification*

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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The abstract of the disclosure is objected to because it uses words which can be implied, i.e., "A method for providing", "In one embodiment", ....

Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the summary of invention and its header are missing. See MPEP 1302.01, especially form paragraph 13.07, i.e., "Applicant is required to ...".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 16-18, 20, 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. Re. 33,333, issued to Taylor.

As per claim 1, Taylor discloses a switching circuit (Fig. 5), comprising:

at least two switches (80 and 81) between an upper voltage (+75V) and lower voltage (-75V) and a passive break-before-make (BBM) element (inductor 83 and the resistor in parallel with it, inductor 83 and resistor are clearly passive components) in series with the at least two switches (as shown) and the switching circuit connected to a load (see Fig. 6, the load is connected to the OUTPUT 113).

As per claim 2, see Fig. 1 and 6, explanation is given in column 3, lines 12-16.

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As per claim 3, inductive element reads on inductor 83 and resistive element reads on the resistor in parallel with the inductor 83.

As per claim 5, as shown in Fig. 6, the lowpass filter includes inductors and capacitors.

As per claim 6, see column 5, lines 45-46, i.e., "push-pull high current power amplifier".

As per claim 7, switches 80 and 81 are transistors.

As per claim 16, same rejections as noted in claim 1, the preamble is seen in the title which is clearly an audio amplifier circuit and modulator 7 is seen as a digital circuit (column 2, lines 63-64).

As per claim 17, inherently met since Taylor circuit is an audio amplifier system.

As per claims 18 and 20, same as claims 3 and 6, respectively.

As per claims 25, this claim is merely a method to operate the switching circuit of claim 1, since Taylor teaches the circuit, he inherently teaches the recited method.

As per claim 26-27, the recited storing step is performed by the inductor 83.

As per claims 28-29, the recited dissipating step is performed by the resistor connected in parallel with inductor 83.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. Re. 33,333, issued to Taylor.

Taylor discloses a switching circuit as discussed in claim 1 but does not explicitly disclose the switching circuit is internal to an integrated circuit chip as called for in the claim.

The Examiner takes Official Notice the fact that packing an audio amplifier circuit in an integrated chip is a well-known and popular practice nowadays.

It would have been obvious to one skilled in the art at the time of the invention was made to pack the Taylor's audio amplifier circuit in an integrated chip for the well-known advantage which is to improve the reliability of the Taylor's audio amplifier circuit.

***Allowable Subject Matter***

7. Claims 4 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4 and 19 are allowable because the prior art of record fails to teach or suggest a switching circuit which includes a passive MBB having the structure recited in these claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is 703-306-9179. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Minh Nguyen  
Primary Examiner  
Art Unit 2816

MN  
July 24, 2003